

# Computer Standards Committee

CSAC briefing  
June 7, 2002

# The Vision



Standardization should point the way to higher quality offerings and support to all LBNL computer users, from scientists to administrators.

ITSD must supply a minimum infrastructure (e-mail, networking, administrative applications and cyber security) under an essentially fixed overhead and fixed recharge rate.

Efficiencies derived by some sort of standardization of hardware and/or software should result in improved service to users, as measured by a metric including all costs across the laboratory, not just to ITSD

# Guiding Principles



- Standards are recommended but not mandatory. ITSD support is provided for standards based services.
- Waivers, when employed, are not intended as a barrier to accomplishing work but as a means to acknowledge that due consideration of the standard has been made.
- In the future, standards will depend more on the choice of browser than the choice of platform.

# SCOPE



Topic	# of recommendations
Document interchange	6
Browsers	3
Open Source Software	1
Web Development Tools	8
Business Applications	2
Procurement Assistance	6

# SCOPE



Topic	# of recommendations
Mac Support	See other topics
Desktop support	4
Unix/Linux	4
Backups and archiving	4
Informal Centers of Excellence	3
Laptops and PDA's	4

# Document Interchange



- **Problem:** LBNL is not (and never will be) an exclusively “Microsoft centric” environment
- **Key Points**
  - Linux/UNIX Users do not have access to MS Office but compatible products are getting better
  - PDF are required by many scientists, as are “Lifeline” documents (e.g. PPR forms published with MS Word)
- **Recommendations:**
  - Support or recommend translation tools and services
    - PDFs, Office documents, CAD drawings
    - Consider formats based on industry standards
  - Take cross platform issues into account when developing “lifeline” documents for general lab use

# Browsers



- **Problem:** For infrastructure software the browser and not the platform is now the primary issue.
- **Key Points**
  - Vendors are building for IE, not Netscape
  - IE does not run on Linux/Unix systems
  - IE runs on MACs.
  - We don't have a "MAC" problem. We have a Linux/Unix problem!
- **Recommendations**
  - Adopt IE as a supported browser
  - Find a mail client that can use IE as a default browser
  - Support Netscape for Life Line applications (needed by linux/Unix users)

# Open Source Software



- **Problem:** cost of commercial products in wide use at LBNL is too high and not always available to users who need the functionality
- **Key Points**
  - Microsoft Office is the current standard product
  - Star Office (Sun Microsystems) and Open Office (open source code base for Star Office) support word, excel and powerpoint files and a subset of MS functionality.
  - Open Office/Star office run on Linux, UNIX, Windows systems
- **Recommendation**
  - Investigate feasibility of supporting OpenOffice and/or Star Office and identifying appropriate deployment strategy

# Web Development Tools



- **Problem:** User developed software applications sometimes revert to ITSD for follow on maintenance
- **Key Points**
  - Example: Cold Fusion web applications handed over to ISS
  - Efficiency and Effectiveness of ISS depends on standards
- **Recommendation**
  - Research, adopt and publish internal software development standards so that users are made aware of what ITSD will be capable of supporting
    - For example, Dreamweaver, JSP/Java Servlets, Oracle, Solaris

# Business Applications



- **Problem:** ITSD can not deploy every application on every system.
- **Key Points**
  - Client/Server Applications are being replaced by Web deployed, thin client (browser based) products
  - Vendors are market driven in the browsers they support
    - Commercial software (e.g. Peoplesoft) may not support Netscape in the future and are developed with IE in mind
  - Lifeline applications are those that should be available to all users at the Lab
    - Email, calendar, lets, purchasing, asset management, HR self help, IRIS
- **Recommendation**
  - Provide multi-browser support for Lifeline applications

# Procurement Assistance



- **Problem:** Acquisition of computer equipment should not be impeded by increasing the cost and time to procure.
- **Key Points**
  - Micron (PC's) and Dell (Laptops) are "BOA vendors" and can be acquired with pcard.
  - All other equipment must be acquired through purchase orders
  - Publishing standards will assist the user in making the right choice.
- **Recommendations**
  - Develop Basic Ordering Agreements (BOA's) for MAC, Linux and PC's, (and allow pcard procurement)
  - Allow waiver authorization to be made at the level of "Project Id signature authority"

# Mac Support

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- Included as a byproduct of other sections of the report.

# Desktop support



- **Problem:** Total Cost of Ownership needs to be reduced
- **Key Points**
  - Economies of scale can be achieved for some groups of users by providing standard software images
    - Administrative users of corporate business applications
  - PC vendors have many component choices.
    - standards for a PC reduce maintenance costs
  - Printer maintenance can be very expensive
    - (Xerox/Tektronix costs \$295 for the first 30 minutes)
- **Recommendation**
  - Provide maintenance for equipment acquired via BOA
    - (outsource if economically desirable)
  - Develop standard configuration for BOA equipment
    - Provide a buying guide and maintenance for printers

# Scientific Workstations

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## (Unix/Linux)



- **Problem:** Linux is causing a decentralization of Unix support where UNIX system administration and cyber security expertise may not be sufficient
- **Key Points**
  - Similar to the evolution of Windows Systems
  - Multi user “servers” are set up by relatively inexperienced users
- **Recommendation**
  - Develop and maintain a standard Linux Image
  - Require users to identify a system administrator or gain the training needed
  - Provide central support for hardware and software

# Backups and archiving



- **Problem** Data Storage is increasing but Backup and Archiving have fallen behind.
- **Key Points**
  - Computer systems at LBNL may not always be backed up appropriately.
  - A service for Archiving data does not exist.
- **Recommendations**
  - PI's and Line managers must accept responsibility for the decision to backup data (or not to, if that is appropriate)
  - ITSD must provide a central solution

# Informal Centers of Excellence



- **Problem:** Lab users are not aware of IT expertise at the Lab
- **Key Points**
  - ITSD is not funded to be an expert on all products.
  - Some products are important to more than one group at the lab (SAS, Labview, Autocad)
- **Recommendations:**
  - Help Desk should offer a referral service to local centers of excellence when appropriate
  - Users identify themselves (engineering for labview) for referral
    - User groups & birds of a feather groups can be referenced as well as business centers

# Laptops and PDA's



- **Problem:** No economy of scale for laptop and PDA support
- **Key Points**
  - no standards for Laptops and PDAs
  - Laptop models change frequently
  - Many features are based on user preference (pointing devices, for example) that have ergonomic implications
- **Recommendations**
  - Provide buying advice for both.
  - Provide a BOA for PDA's which can be centrally supported  
(e.g. calendar synchronization)

# Areas well covered



- Electronic Mail
  - Viewed by the committee as an outstanding example of how standards should be employed:
    - standards based (imap, ldap) and cross platform support
    - user choice of clients but central support for one
- Security
  - Viewed as successfully balancing the needs of the lab with appropriate processes and policies.
    - Some suggestions were offered for users and ITSD
- Network
  - Another excellent example of standards being implemented via central services
    - Assumes wireless standards are already being addressed